

**Notice of Allowability**

Application No.

09/605,334

Applicant(s)

GEIST ET AL.

Examiner

Thomas H. Stevens

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2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendmend filed 12/05/2005.
2. ☒ The allowed claim(s) is/are 1-32.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

### **DETAILED ACTION**

1. Claims 1-32 were examined.

#### ***Section I: Appeal Brief***

2. The arguments by applicants filed 12/05/2005 was persuasive to negate an examiner's answer, thus the rejection is withdrawn. Furthermore, the examiner's search results were silent on the claim limitations to substantiate a prima facie case argument. Therefore the case is in condition for allowance.

#### ***Allowable Subject Matter***

3. Claims 1-32 are allowed.
4. The following is an examiner's statement of reasons for allowance:  
  
While Cleveland ("Tableau-base Model Checking in the Proportional Mu-Calculus" (1990)) and Cleveland et al. (U.S. Patent 6,385,765 (2002)) teach (claim 1) a method for verification, comprising: providing an implementation model, which defines model states of a target system; the tableau defining tableau states; (claim 19) a verification processor which is configured to receive an implementation model, defining model states of a target system and of the target system and which is operative, the tableau defining tableau states; (claim 21) a computer software product for of a target system, which by comparison with an implementation model which defines model states between the model states, the product comprising a computer-readable medium having computer program instructions recorded therein, which instructions, when read by a computer, cause the computer the tableau defining tableau states; (claim 25) a method for verification, comprising: providing an implementation model; the tableau defining

tableau states; (claim 31) a model checking apparatus, which is configured to receive an implementation model, defining model states of a target system and, , and which is operative the tableau defining tableau states; (claim 32) a computer software product for verification of a specification of a target system, which by comparison with an implementation model, which defines model states of the target system, the product comprising a computer-readable medium having computer program instructions recorded therein, which instructions, when read by a computer, none of these references, taken either alone or in combination, with the prior art of record disclose:

*(claim 1) "tableau transitions between the tableau states in accordance with properties providing a specification and comparing the tableau transitions to determine whether a discrepancy exists therebetween,"*

*(claims 19) " including properties that the system is expected to obey, to receive a specification, to create a tableau from the specification and tableau transitions between the tableau states in accordance with the properties to compare the tableau transitions to determine whether a discrepancy exists therebetween,"*

*(claim 21) "verification of a specification, specification includes properties that the system is expected to obey, with tableau transitions between the tableau states in accordance with the properties to create a tableau from the specification, to compare*

*the tableau transitions to the model transitions to determine whether a discrepancy exists therebetween,”*

*(claim 25) “providing a specification of the target system, comprising properties that the system is expected to obey; with tableau transitions between the tableau states and model transitions between the model states creating a tableau from the specification, and comparing the model and the tableau by inputting the model and the tableau to an automatic model checking program,”*

*(claim 31) “to receive a specification of the target system and tableau transitions between the tableau states in accordance with the properties and model transitions between the model states, and to create a tableau from the specification, to compare the tableau to the model by inputting the model and the tableau to an automatic model checking program”*

*(claim 32) “specification includes properties that the system is expected to obey, cause the computer to create a tableau from the specification, the tableau defining tableau states with tableau transitions between the tableau states in accordance with the properties, and to compare the tableau to the model by inputting the model and the tableau to an automatic model checking program,”*

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in combination with the remaining elements and features of the claimed invention. It is for these reasons that the applicants' invention defines over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

### ***Correspondence Information***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715, Monday-Friday (8:00 am- 4:30 pm EST).

If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Paul Rodriguez 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Answers to questions regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

March 4, 2006

TS



*Paul L. Rodriguez*  
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Primary Examiner  
Art Unit 2125